VNET

GUIDELINES
FOR EFFECTIVE
WEB CONFERENCES

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VIRGINIA DEPARTMENT OF EDUCATION
DIVISION OF
**TECHNOLOGY &
CAREER EDUCATION**
OFFICE OF EDUCATIONAL TECHNOLOGY

A principal goal of the Office of Educational Technology (OET) is to support the effective integration of technology into teaching, learning, and school management. To that end, OET has developed the Virginia Education Network for Virtual Conferencing (VNET), a virtual meeting network that supports state-of-the-art conferencing solutions. VNET is part of the agency's ongoing efforts to improve communication and collaboration among education administrators across the Commonwealth. VNET is designed to

- Reduce costly travel and time out of office for division administrators attending meetings

- Increase division-level administrator participation in statewide discussions or collaborations

- Provide instant technical assistance and consultation services to divisions

- Provide individual divisions and regional consortia with a virtual network to support meetings and professional development activities

VNET presently supports two forms of virtual communications: two-way interactive video conferencing and Web-based conferencing. This overview of Web conferencing and VNET is the second document in a series about virtual meetings.

WHAT IS A WEB CONFERENCE?

A **Web conference** uses audio and video communications technology to conduct real-time meetings over the Internet. It combines teleconferencing with the Web to produce interactive presentations and collaboration. Webinars and Webcasts are types of Web conferences that primarily are one-way communications, i.e., delivered by the presenter with no opportunity for audience feedback. Virtual meetings like these have gained popularity because they offer a richer form of communication while saving time and money. Web conferences allow participants to remain at their desks and take part in the interactive sessions via their computer desktops.

Using Web conferencing with other virtual collaboration tools can increase productivity, improve communication among physically separate locations, allow groups to meet more frequently, and facilitate critical meetings on short notice. Other benefits include immediate technical assistance and troubleshooting, substantially reduced costs for travel, and the potential for involving more staff. The equipment setup is relatively easy, and the initial cost typically is inexpensive; however, there often are subscription fees for hosting services like WebEx, Conference Call, Live Meeting, and GoToMeeting. Web conferencing systems range from open-source services with limited features to extensive systems with a full range of capabilities. The first step in selecting a Web conference service provider is to identify your division's virtual meeting needs.

WEB CONFERENCE SYSTEMS

Web conferences may be conducted using only a computer and an Internet connection. Options include audio-only participation, video conferencing, or an online chat or Q&A function. During a Web conference, each participant sits at his or her own computer and is connected with other participants via the Internet. Audio can be transmitted through a standard telephone service or VoIP (Voice over Internet Protocol), or by using a USB headset as the microphone and speakers. Most Web conferences do not require a software download; however, downloaded hosting software may be required to support other conference applications.

Many companies now offer Web conferencing as a complete service, while others make the software available as a licensed product that can then be hosted on a client server. The costs vary depending on the features; in addition, open-source solutions require a minimum investment. When choosing a conferencing solution, consider the features that will meet your division's needs. Web conferencing providers may include services such as whiteboarding, interactive discussions, video conferencing, chat or text functions, recording sessions for archiving and review, VoIP audio, and application or document sharing.

APPLICATION AND DOCUMENT SHARING DURING A WEB CONFERENCE

With Web-based conferencing, participants in different physical locations can exchange documents, share presentations, stream media, or collaborate over a spreadsheet. A true virtual meeting allows instant collaboration and feedback. To achieve this, Web conference hosting services have two important capabilities:

Application sharing is the ability of one party in the conference to share an application, such as word processing, database, or spreadsheet, with all meeting participants. Application sharing sends images in real time, allowing the host and participants to edit the document and see all the application tools. Since this process supports collaboration during virtual meetings, it requires more bandwidth. Added benefits are that only the meeting host or presenter needs to have the required application on his or her computer and that control of the application can be passed from the host to participants.

Document sharing is the ability to present a document for review and markup. The document image is presented much like a fax and cannot be edited during the session. Since it requires very little bandwidth, this application usually is used with lower connection speeds or to share documents such as meeting agendas, presentations, or reports.

PREPARING FOR A WEB CONFERENCE

The Web conference is a business meeting, and general etiquette guidelines and presentation skills apply. Web conferencing can be conducted in various settings; it is important to remember that Web conferences may be recorded, broadcast, or archived. All verbal, and facial if video is used, expressions will be captured.

Prepare for your meeting. Before beginning, place all the files you intend to share in a single folder for quick retrieval. Turn off your screen saver and any e-mail arrival notice.

Close any applications not in use, especially those that use bandwidth. Instant messaging, e-mail, and chat programs can be distracting and cause connectivity problems.

Be aware of what is being transmitted. Avoid side conversations and rustling papers. When using a video input for the conference, assume the camera is always on you.

Give the host your full attention. This is just as important in a Web meeting as in any business situation. Turn off beepers and cell phones, and mute your system if it is necessary to speak with someone not participating in the meeting.

Give the speaker time to finish talking. Some systems have a slight delay; wait three to five seconds after the transmission to ensure each person has time to ask questions or make comments.

When participating in a Web meeting with multiple participants, identify yourself. This can avoid confusion and ensure participants address comments and questions to the correct person.

VNET AND WEBEX

VNET utilizes Web conferencing contract services through WebEx. Department staff may organize and host meetings via the VNET system with educational agencies and organizations, regional consortia, division administrators, and key stakeholders in physically separate locations.

WebEx provides resources including instructions and other detailed information on the DOE WebEx site.

PARTICIPATING IN A VNET WEB CONFERENCE

Web-based meetings can be powerful collaboration tools. In the past, some people have been reluctant to participate due to security issues, expense, or lack of technical expertise. Web-based conferencing has matured as virtual meetings have become easier and more reliable than ever before. To participate fully, desktop conferencing equipment should include the following:

- A computer with 56K or faster Internet connection

- JavaScript and cookies enabled for the browser

- Microphone and speakers or headphones for VoIP

- Standard phone service for dial in

For a complete list of WebEx system requirements specific to your computer, go to http://support.webex.com/support/system-requirements.html.
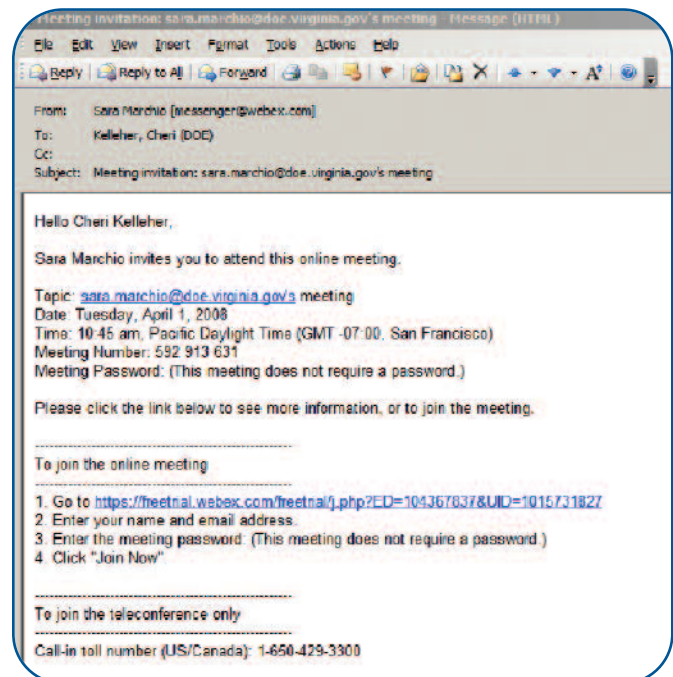
If you are invited to participate in a Web-based conference through WebEx, the notice will arrive as an e-mail with the meeting link included. Your VNET host will provide information regarding the appropriate audio system (VoIP or telephone bridge) and how to test your computer connection prior to the meeting. When the meeting date and time arrive, simply click on the URL in the invitation. Some meetings require a password, which will be included in the invitation e-mail. It also is a good idea to join the meeting a few minutes early to ensure the audio and connection work properly; keep the number of the VNET coordinator on hand in case of technical issues.

Participants may take part in discussions by dialing in by telephone or by using the meeting online chat function. In addition, the host may pass control of the meeting to another participant, allowing for additional collaboration.

HOSTING A WEBEX MEETING

The WebEx Web conferencing system offers online training, tutorials, and FAQs at www.webex.com. There is no substitute for practice when participating in a virtual meeting. Advance preparation for Web conferencing or online collaboration is crucial; try to schedule a dry run a few days before your first meeting. Review the different features in Training Center, Meeting Center, and Event Center. Determine which matches your needs.

These simple steps should get you started on hosting your first Web conference using your WebEx subscription service:

Log in. Go to the Department's WebEx site.
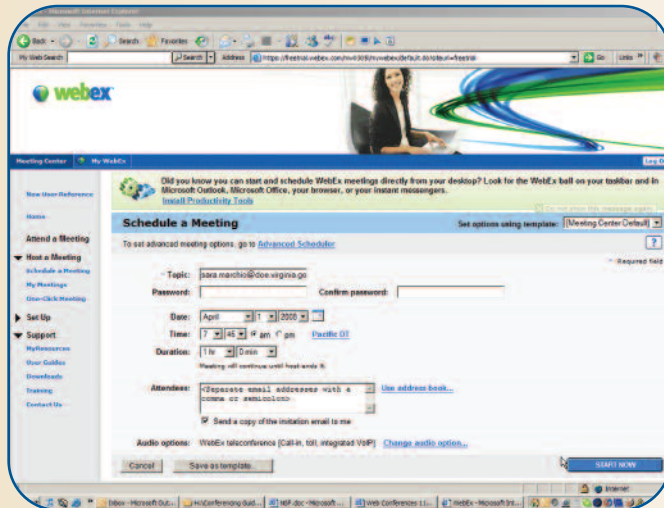
Click *Host a Meeting* **and then** *Schedule a Meeting.* You will need the user id and password. See your director for these.

Set up your meeting and invite participants. Type your meeting topic and password. Complete date, time, and duration for your meeting. Add attendees; WebEx automatically will send e-mail invitations with instructions to the attendees.
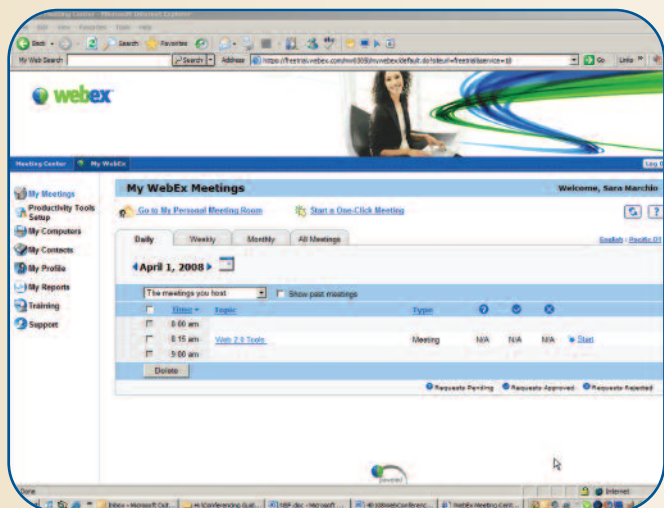
Start your meeting at the required time. As the meeting host, you must start the meeting before participants can join. It's usually a good idea for hosts to begin five minutes prior to the scheduled time. Go to *My WebEx* and click the *Start* link next to the scheduled meeting. Once the meeting starts, you may send reminders to participants or issue new invitations spontaneously.

Present. Choose an option to share documents, present slides, collaborate, or share applications from the toolbar.

End the meeting. This option can be selected from the toolbar.

Present a Document
Show presentations, documents, and rich media
Learn More...

Share an Application
Share or demonstrate select applications
Learn More...

Share Your Desktop
Share or demonstrate all active applications
Learn More...

TROUBLESHOOTING

Before participating in Web conferences, you should work with your technical representative to ensure the computer settings and audio equipment are set up properly. Proper training is important; most problems are the result of user error. In addition, detailed instructions should be located nearby, along with the contact information for technical support. A number of factors can affect the performance of the Web conferencing equipment, including the speed of your computer's Internet connection, performance of the Internet service provider, and performance of firewall and proxy servers.

These general troubleshooting strategies can guide novices through simple-to-fix issues that can occur before or during a virtual meeting:

You attempt to join a meeting and receive a *Session Not Started* or *Error* message. The meeting host may not have started the meeting. Check the meeting time, and try again in a few minutes. Another possibility is that the meeting requires a password. Refer to your invitation e-mail.

You can see the application or document but can't hear anything. First, check the audio system volume; it may be turned down. If this isn't the case, check the connection; it may be necessary to dial into the conference. If the session is already in progress, you may also participate via the chat function on the right side of the screen.

You can see and hear, but the audio is terrible. If you are using VoIP, connectivity could be the issue. Many variables can affect the Web conference speed, including the speed of your computer's connection to the Internet, the performance of your Internet service provider, overall Internet traffic on your routed connection to the server, and the performance of firewall and proxy servers. Consider calling into this meeting and contact your technical representative if the problem continues.

You have tried everything and still cannot connect. At this point, you should call your technical representative.

The primary advantage of hosting a Web conference is to experience the benefits of face-to-face communications while saving money and time. The technologies clearly are at an early stage; future improvements in the Internet and other Web-based services continually will change how we meet and collaborate.

GLOSSARY

Application Sharing   The ability of two or more users to access and edit using a single software application in real time over the Internet

Chat Box   A text box component of the Web-based meeting system that allows participants to communicate with participants

Document Sharing   The ability of two or more users to access a single document in real time over the Internet

E-Meeting   A Web conference or virtual meeting

Host   A Web conference lead or organizer who controls functionalities and applications within the meeting

USB   Universal Serial Bus, a standardized interface socket that allows peripherals to connect to computers

Virtual Meeting   A meeting or conference facilitated via the Internet

VoIP   Voice over Internet Protocol—Internet telephony

Webcast   A media file distributed over the Internet—broadcasting using the Internet

Webinar   A one-way Web conference, usually from the presenter to the audience

RESOURCES

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All Web sites were available as of 24 April 2008.

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